## **Educational attainment**

Changes in educational attainment over time indicate changes in the demand for skills and knowledge in the work force, as well as cultural evolution. An increase in the overall level of educational attainment can reflect the increasing emphasis society places on completing high school and college. Completing high school or college is an important educational accomplishment that yields many benefits, such as better job opportunities and higher earnings.

- The educational attainment of 25- to 29-year-olds increased between 1971 and 1997. The percentage of students completing high school rose from 78 to 87 percent; the percentage of high school completers with some college rose from 44 to 65 percent; and the percentage of high school completers with 4 or more years of college rose from 22 to 32 percent.
- The educational attainment of blacks ages 25–29 increased across all education levels between 1971 and 1997. For example, the percentage of high school completers rose from 59 to 87 percent for blacks during this time period. However, the percentage

- difference between the attainment of blacks and whites decreased only for high school completers.
- In 1997, fewer Hispanic 25- to 29-year-olds completed high school than their black counterparts. The percentages of Hispanic and black high school completers with some college or a bachelor's degree or higher were similar.
- In 1997, females ages 25–29 were more likely than their male peers to have completed high school, some college, or a bachelor's degree or higher (see supplemental tables 22-1, 22-2, and 22-3).

Percentage of 25- to 29-year-olds who completed high school, and percentage of high school completers with 1 or more and 4 or more years of college, by race/ethnicity: March 1971–97

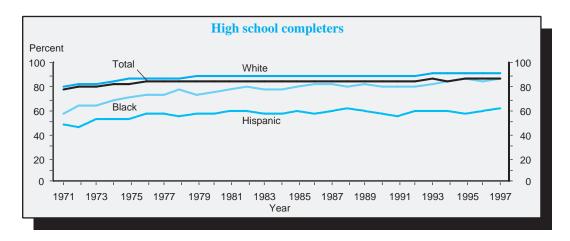
					High school completers with:								
	Н	igh school	complet	ers	1 c	or more yea	ege	4 or more years of college					
March	Total	White	Black	Hispanic	Total	White	Black	Hispanic	Total	White	Black	Hispanic	
1971	77.7	81.7	58.8	48.3	43.6	44.9	30.9	30.6	22.0	23.1	11.5	10.5	
1973	80.2	84.0	64.1	52.3	45.3	46.6	33.5	31.6	23.6	24.8	12.7	10.8	
1975	83.1	86.6	71.1	53.1	50.1	51.2	38.7	41.1	26.3	27.5	14.7	16.6	
1977	85.4	88.6	74.5	58.0	53.2	54.8	41.7	41.1	28.1	29.8	16.9	11.5	
1979	85.6	89.2	74.7	57.1	54.1	55.7	41.7	44.0	27.0	28.6	16.6	12.9	
1981	86.3	89.8	77.6	59.8	50.1	51.2	42.5	39.6	24.7	26.3	14.9	12.5	
1983	86.0	89.3	79.5	58.4	50.6	51.6	41.6	42.9	26.2	27.4	16.2	17.8	
1985	86.2	89.5	80.5	61.0	50.8	51.8	42.7	44.2	25.7	27.3	14.4	18.2	
1987	86.0	89.4	83.5	59.8	50.7	51.4	43.0	44.6	25.6	27.6	13.8	14.5	
1989	85.5	89.3	82.3	61.0	51.3	52.8	42.1	44.3	27.3	29.5	15.4	16.5	
1991	85.4	89.8	81.8	56.7	53.1	54.9	43.2	42.2	27.2	29.7	13.4	16.3	
	Diplom	a or equiv	alency c	ertificate	Some college				Bachelor's degree or higher				
1992	86.3	90.6	80.9	60.9	56.7	58.8	44.7	46.8	27.3	30.0	13.7	15.6	
1993	86.7	91.2	82.7	60.9	58.9	61.0	48.4	48.8	27.3	29.8	16.1	13.6	
1994	86.1	91.1	84.1	60.3	60.5	62.7	49.6	51.5	27.0	29.7	16.2	13.3	
1995	86.9	92.5	86.8	57.2	62.2	64.6	52.0	50.3	28.4	31.2	17.8	15.5	
1996	87.3	92.6	86.0	61.1	64.7	67.0	55.9	50.9	31.1	34.1	17.0	16.4	
1997	87.4	92.9	86.9	61.8	65.4	68.2	53.7	53.9	31.8	35.2	16.4	17.8	

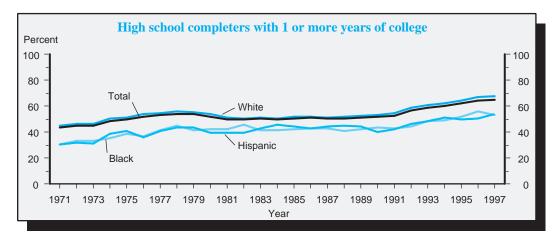
NOTE: The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. The category "diploma or equivalency certificate" includes those who have a high school diploma or an equivalency certificate; "some college" includes those with an associate degree or vocational certificate; and "bachelor's degree or higher"

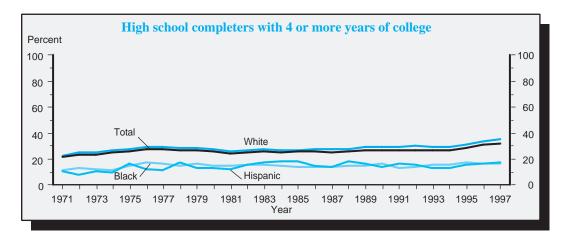
includes those with an advanced degree. See the supplemental note to this indicator for further discussion. Included in the total but not shown separately are other racial/ethnic groups.

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

Percentage of 25- to 29-year-olds who completed high school, and percentage of high school completers with 1 or more and 4 or more years of college, by race/ethnicity: March 1971–97







NOTE: The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. See the supplemental note to this indicator for further discussion. Included in the total but not shown separately are other racial/ethnic groups.

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

Table 22-1 Percentage of 25- to 29-year-olds who completed high school, by race/ethnicity and sex: March 1971–97

		All			White			Black		Hispanic		
March	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1971	77.7	79.1	76.5	81.7	83.0	80.5	58.8	56.7	60.5	48.3	51.3	45.7
1972	79.8	80.5	79.2	83.4	84.1	82.7	64.1	61.7	66.0	47.6	47.1	47.9
1973	80.2	80.6	79.8	84.0	84.2	83.9	64.1	63.2	64.9	52.3	54.2	50.6
1974	81.9	83.1	80.8	85.5	86.0	85.0	68.4	71.5	65.8	54.1	55.9	52.5
1975	83.1	84.5	81.7	86.6	88.0	85.2	71.1	72.3	70.1	53.1	52.2	53.9
1976	84.7	86.0	83.5	87.7	89.0	86.4	74.0	72.8	74.9	58.1	57.6	58.4
1977	85.4	86.6	84.2	88.6	89.2	88.0	74.5	77.5	72.0	58.0	61.9	54.6
1978	85.3	86.0	84.6	88.5	88.8	88.2	77.4	78.7	76.3	56.5	58.5	54.6
1979	85.6	86.3	84.9	89.2	89.8	88.5	74.7	74.0	75.3	57.1	55.5	58.6
1980	85.4	85.4	85.5	89.2	89.1	89.2	76.7	74.8	78.3	57.9	57.0	58.8
1981	86.3	86.5	86.1	89.8	89.7	89.9	77.6	78.8	76.6	59.8	59.1	60.4
1982	86.2	86.3	86.1	89.1	89.1	89.1	81.0	80.4	81.5	61.0	60.6	61.2
1983	86.0	86.0	86.0	89.3	89.3	89.3	79.5	79.0	79.9	58.4	57.8	58.9
1984	85.9	85.6	86.3	89.4	89.4	89.4	79.1	75.9	81.7	58.6	56.7	60.1
1985	86.2	85.9	86.4	89.5	89.2	89.9	80.5	80.6	80.5	61.0	58.6	63.1
1986	86.1	85.9	86.4	89.6	88.7	90.4	83.5	86.4	81.0	59.1	58.2	60.0
1987	86.0	85.5	86.4	89.4	88.9	90.0	83.5	84.5	82.6	59.8	58.6	61.0
1988	85.9	84.7	87.1	89.7	88.4	90.9	80.9	80.9	80.9	62.3	59.9	64.8
1989	85.5	84.4	86.5	89.3	88.2	90.4	82.3	80.5	83.8	61.0	61.0	61.1
1990	85.7	84.4	87.0	90.1	88.6	91.6	81.8	81.4	82.0	58.2	56.6	59.9
1991	85.4	84.9	85.8	89.8	89.2	90.5	81.8	83.6	80.1	56.7	56.4	57.2
				Hig	gh schoo	ol diploma d	or equivale	ncy certif	icate			
1992	86.3	86.1	86.5	90.6	90.3	91.1	80.9	82.7	79.3	60.9	61.1	60.6
1993	86.7	86.0	87.4	91.2	90.7	91.8	82.7	84.8	80.8	60.9	58.2	63.9
1994	86.1	84.5	87.6	91.1	90.0	92.3	84.1	82.8	85.3	60.3	58.0	63.0
1995	86.9	86.3	87.4	92.5	92.0	93.0	86.8	88.4	85.3	57.2	55.7	58.7
1996	87.3	86.5	88.1	92.6	92.0	93.1	86.0	87.9	84.5	61.1	59.7	62.9
1997	87.4	85.8	88.9	92.9	91.7	94.0	86.9	85.8	87.8	61.8	59.2	64.8

NOTE: The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. The category "high school diploma or equivalency certificate" includes those who have a high school diploma or an equivalency certificate. See the supplemental note to this indicator for further discussion. Included in total but not shown separately are other racial/ethnic groups.

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys, various years.

Table 22-2 Percentage of 25- to 29-year-old high school completers with 1 or more years of college, by race/ethnicity and sex: March 1971–97

	All			White				Black		Hispanic		
March	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1971	43.6	48.7	38.4	44.9	50.2	39.5	30.9	29.0	32.2	30.6	38.3	22.8
1972	45.1	50.7	39.5	46.3	52.3	40.2	33.3	31.7	34.6	32.1	37.2	28.3
1973	45.3	51.4	39.4	46.6	53.0	40.2	33.5	33.5	33.5	31.6	39.4	24.5
1974	48.9	53.8	44.1	50.4	55.6	45.2	35.4	36.9	34.1	39.2	44.1	34.5
1975	50.1	56.0	44.1	51.2	57.3	44.9	38.7	41.0	36.8	41.1	50.4	32.6
1976	52.1	58.2	46.0	53.8	60.1	47.4	37.2	40.5	34.7	36.3	42.3	31.2
1977	53.2	58.0	48.5	54.8	59.9	49.7	41.7	44.2	39.6	41.1	42.6	39.5
1978	54.4	59.3	49.6	55.9	61.4	50.3	44.9	45.2	44.4	43.6	47.2	40.1
1979	54.1	57.7	50.6	55.7	59.4	51.9	41.7	40.7	42.5	44.0	50.7	38.0
1980	52.3	55.8	49.0	53.8	57.3	50.3	42.3	43.6	41.3	39.9	45.5	34.7
1981	50.1	52.7	47.5	51.2	54.1	48.3	42.5	43.0	42.2	39.6	41.7	37.7
1982	49.9	51.5	48.3	50.7	52.2	49.1	45.8	47.4	44.6	39.6	40.6	38.7
1983	50.6	52.1	49.0	51.6	53.4	49.7	41.6	42.0	41.2	42.9	41.1	44.6
1984	50.1	50.9	49.3	51.0	51.7	50.3	41.6	41.6	41.7	45.6	47.5	44.0
1985	50.8	51.5	50.1	51.8	52.5	51.2	42.7	42.4	42.9	44.2	45.9	42.9
1986	51.0	51.4	50.8	52.3	52.8	51.8	43.4	41.5	45.2	42.9	42.8	43.0
1987	50.7	50.4	51.0	51.4	51.5	51.4	43.0	38.4	47.0	44.6	46.3	43.1
1988	50.8	51.6	50.1	51.8	52.4	51.2	41.2	42.9	39.7	44.9	44.3	45.6
1989	51.3	52.0	50.5	52.8	53.4	52.2	42.1	42.2	41.9	44.3	44.8	43.9
1990	52.0	51.8	52.1	53.6	53.4	53.8	44.1	43.0	45.0	40.1	40.4	39.8
1991	53.1	52.3	53.8	54.9	54.7	55.1	43.2	38.3	47.7	42.2	40.9	43.4
						Some	college					
1992	56.7	56.0	57.4	58.8	58.3	59.2	44.7	42.3	46.9	46.8	44.5	49.6
1993	58.9	57.6	60.1	61.0	60.3	61.6	48.4	43.6	52.5	48.8	46.1	51.9
1994	60.5	58.9	62.0	62.7	61.0	64.3	49.6	48.7	50.3	51.5	48.3	55.0
1995	62.2	60.6	63.9	64.6	62.6	66.7	52.0	51.2	52.5	50.3	48.0	52.7
1996	64.7	63.1	66.3	67.0	65.5	68.4	55.9	54.5	57.1	50.9	47.0	55.6
1997	65.4	64.0	66.8	68.2	66.9	69.5	53.7	50.2	56.5	53.9	51.9	56.1

NOTE: The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. The category "some college" includes those with an associate degree or vocational certificate. See the supplemental note to this indicator for further discussion. Included in total but not shown separately are other racial/ethnic groups.

 ${\tt SOURCE: U.S.\ Department\ of\ Commerce,\ Bureau\ of\ the\ Census,\ March\ Current\ Population\ Surveys.}$ 

Table 22-3 Percentage of 25- to 29-year-old high school completers with 4 or more years of college, by race/ethnicity and sex: March 1971–97

	All			White				Black		Hispanic		
March	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1971	22.0	25.8	18.1	23.1	27.0	19.1	11.5	12.1	10.9	10.5	15.4	5.8
1972	23.7	27.3	20.2	24.9	28.6	21.1	13.1	11.6	14.3	7.8	9.5	6.4
1973	23.6	26.8	20.5	24.8	28.3	21.3	12.7	11.3	13.8	10.8	12.4	9.7
1974	25.3	28.7	21.8	27.2	31.1	23.2	11.5	12.3	11.0	10.1	8.9	11.2
1975	26.3	29.7	22.9	27.5	31.1	23.7	14.7	15.3	14.2	16.6	19.7	13.4
1976	28.0	32.0	24.1	29.3	33.5	25.0	17.6	16.5	18.6	12.7	17.9	8.2
1977	28.1	31.2	25.1	29.8	33.4	26.3	16.9	16.5	17.3	11.5	11.3	11.7
1978	27.3	30.2	24.4	28.9	32.6	25.3	15.2	13.6	16.5	17.1	16.4	17.9
1979	27.0	29.9	24.2	28.6	31.6	25.5	16.6	17.8	15.7	12.9	14.2	11.4
1980	26.3	28.1	24.5	28.0	30.1	26.0	15.0	14.0	15.8	13.2	15.0	11.8
1981	24.7	26.6	22.8	26.3	28.4	24.2	14.9	15.4	14.5	12.5	14.4	10.9
1982	25.2	26.9	23.4	26.7	28.8	24.6	15.6	14.6	16.4	15.9	17.8	14.2
1983	26.2	27.8	24.6	27.4	29.4	25.4	16.2	16.5	15.9	17.8	16.8	18.8
1984	25.5	27.1	24.0	27.0	28.5	25.4	14.8	17.1	13.0	18.1	17.0	19.2
1985	25.7	26.9	24.6	27.3	28.6	26.0	14.4	12.9	15.6	18.2	18.6	17.7
1986	26.0	26.7	25.3	28.1	29.1	27.1	14.2	11.9	16.3	15.3	15.4	15.2
1987	25.6	26.1	25.2	27.6	28.0	27.1	13.8	14.0	13.6	14.5	15.7	13.4
1988	26.4	27.6	25.2	28.0	29.1	26.9	14.8	15.3	14.4	18.1	19.8	16.3
1989	27.3	28.3	26.5	29.5	30.5	28.5	15.4	15.0	15.6	16.5	15.7	17.2
1990	27.1	28.0	26.2	29.3	30.0	28.6	16.4	18.6	14.5	14.0	12.9	15.2
1991	27.2	27.0	27.3	29.7	29.7	29.8	13.4	13.7	13.1	16.3	14.4	18.1
					Е	achelor's d	earee or hi	aher				
1992	27.3	26.9	27.8	30.0	29.5	30.4	13.7	14.2	13.2	15.6	14.3	17.0
1993	27.3	27.2	27.4	29.8	30.0	29.5	16.1	14.8	17.2	13.6	12.1	15.3
1994	27.0	26.6	27.4	29.7	29.8	29.6	16.2	14.0	17.9	13.3	11.3	15.5
1995	28.4	28.4	28.5	31.2	30.9	31.4	17.8	19.7	16.1	15.5	14.0	17.1
1996	31.1	30.2	32.0	34.1	33.6	34.7	17.0	13.9	19.6	16.4	17.1	15.6
1997	31.8	30.7	32.9	35.2	34.1	36.2	16.4	13.7	18.5	17.8	16.1	19.6

NOTE: The Current Population Survey (CPS) questions used to obtain educational attainment were changed in 1992. The category "bachelor's degree or higher" includes those with an advanced degree. See the supplemental note to this indicator for further discussion. Included in total but not shown separately are other racial/ethnic groups.

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.

## Note to Indicator 22: Educational attainment

The Current Population Survey (CPS) questions on educational attainment, which were used in the analyses for *Indicators* 22, 31, 32, and others, were changed in 1992. Before 1992, the educational attainment questions were 1) "What is the highest grade or year of regular school...has ever attended?" and 2) "Did...complete the grade?" There were 19 response categories for grades 1–8, first through fourth year of high school, and first through sixth year of college.

For example, if respondents attended grade 12 but did not complete it, it was assumed that they had completed grade 11. If the highest grade respondents had completed was grade 9, 10, or 11, they were classified as high school dropouts. If respondents had completed grade 12 or more, they were considered to have completed high school. If they had completed 4 or more years of college, they were considered to have completed college.

Beginning in 1992, the two questions on educational attainment were changed to a single question: "What is the highest level of school...has completed or the highest degree...has received"? In the new response categories, several of the lower education levels were collapsed into a single summary category such as "1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, or 4<sup>th</sup> grades." At the high school level, a new category, "12<sup>th</sup> grade, no diploma," was added. The categories for high school completion and beyond were changed as follows:

- High school graduate
- High school diploma or equivalent (e.g., GED)
- Some college but no degree
- Associate degree in college, academic program
- Associate degree in college, occupational or vocational program
- Bachelor's degree (e.g., B.A., A.B., B.S.)
- Master's degree (e.g., M.A., M.S., M.Eng., M.Ed., M.S.W., M.B.A.)
- Professional school degree (e.g., M.D., D.D.S., D.V.M., L.L.B., J.D.)
- Doctor's degree (e.g., Ph.D., Ed.D.)

The new question puts more emphasis on credentials received beginning at the high school level and less emphasis on the last grade level attended or completed in college if that attendance did not lead to a credential.

This change created some uncertainty about the comparability of measures, such as high school completion rates and college completion rates over time. Below is a discussion of the possible effects the new question may have on high school and college completion rates.

High school completion: The earlier educational attainment question did not explicitly address high school equivalency certificates. Therefore, it is possible that an individual who attended grade 10, dropped out without completing that grade, and later took the GED test and received a high school equivalency credential would not have been counted as completing high school. The new question, however, explicitly treats these individuals as having completed high school. Since 1988, an additional question has been added to the October CPS to explicitly ask respondents whether they had taken the GED. The vast majority of those who responded "yes" were classified as high school completers using the educational attainment question.

The earlier educational attainment question treated individuals who completed grade 12 as high school completers. However, the new question added a new response category called "12<sup>th</sup> grade, no diploma," and these respondents were not treated as having completed high school—historically, the number of individuals in this category has been very small. In summary, it appears that the question change has had minor effects on measured high school completion rates.

College completion: With the increasing prevalence of individuals taking more than 4 years to earn a bachelor's degree, some researchers are concerned that the college completion rate based on the category "4th year or higher of college completed" would overstate the bachelor's degree (or higher) completion rate. However, the college completion rates among those ages 25–29 in 1992 and 1993 using the new CPS question were very similar to the completion rates for those in 1990 and 1991 using the old questions. In summary, it appears that the question change has had very little effect on measured college completion rates.

Some college: With the new question, someone who attends college for only a few months would respond "some college," but with the old question they would have responded "attended first year of college and did not complete it." In the past, the

calculation of the percentage of the population with 1–3 years of college excluded these individuals. With the new question, the information to exclude them is not available, and those respondents with only a few months of college are included in the "some college" category. In principle, the percentage of individuals with "some college" or an associate degree would be expected to be larger than the percentage with 1–3 years of college. Therefore, it would not be accurate to make comparisons between the percentage of those with "some college or an associate degree" using the new question and the percentage of those who completed "1–3 years of college" using the old question.

Indicators 31 and 32 use labor force statistics for the civilian population and annual median earnings for wage and salary workers with different levels of educational attainment. The discussion above suggests that the "high school completer" category based on the new item is larger than before, because it includes all those with an equivalency certificate;

however, it is actually smaller than before because it excludes those who completed "12th grade, no diploma" and those with only a few months of college. The latter group is now included in the "1–3 years of college" category.

Nevertheless, the employment and earnings of the respondents who have been added and dropped from each category are similar; therefore, the net effect of the misclassification on employment rates and average annual earnings is likely to be minor. For this reason, it is still useful to compare the employment rates and median annual earnings of recent cohorts with "some college or an associate degree" to older cohorts who completed "1–3 years of college."

For further information on this issue, see Robert Kominski and Paul M. Siegel, "Measuring Education in the Current Population Survey," *Monthly Labor Review*, September 1993.

Table S22 Standard errors for the text table in *Indicator 22* 

					High school completers with:									
	H	ligh scho	ol comp	leters	1	or more	years of	f college	4 or more years of college					
March	Total	White	Black	Hispanic	Total	White	Black	Hispanic	Total	White	Black	Hispanic		
1971	0.5	0.5	2.2	2.9	0.7	0.7	2.6	3.8	0.6	0.6	1.8	2.5		
1973	0.5	0.5	2.0	2.6	0.6	0.7	2.5	3.3	0.5	0.6	1.8	2.2		
1975	0.4	0.4	1.8	2.5	0.6	0.7	2.3	3.3	0.5	0.6	1.7	2.5		
1977	0.4	0.4	1.7	2.5	0.6	0.6	2.2	3.3	0.5	0.6	1.7	2.1		
1979	0.4	0.4	1.6	2.3	0.6	0.6	2.1	3.1	0.5	0.6	1.6	2.1		
1981	0.4	0.3	1.5	2.1	0.6	0.6	2.0	2.7	0.5	0.5	1.4	1.8		
1983	0.4	0.4	1.4	2.2	0.6	0.6	2.0	2.9	0.5	0.6	1.5	2.2		
1985	0.4	0.4	1.4	2.1	0.6	0.6	1.9	2.8	0.5	0.6	1.4	2.1		
1987	0.4	0.4	1.3	2.0	0.6	0.6	1.9	2.6	0.5	0.6	1.3	1.8		
1989	0.4	0.4	1.4	2.2	0.6	0.7	2.0	2.9	0.5	0.6	1.5	2.2		
1991	0.4	0.4	1.4	2.0	0.6	0.7	2.0	2.6	0.5	0.6	1.3	2.0		
	Diplom	a or equi	ivalency	certificate		So	me colle	ege	Bachelor's degree or higher					
1992	0.4	0.4	1.4	2.0	0.6	0.7	2.0	2.6	0.5	0.6	1.4	1.9		
1993	0.4	0.4	1.4	1.9	0.6	0.7	2.0	2.5	0.5	0.6	1.5	1.7		
1994	0.4	0.4	1.1	1.2	0.6	0.6	1.7	1.6	0.5	0.6	1.2	1.1		
1995	0.4	0.3	1.0	1.3	0.6	0.6	1.6	1.7	0.5	0.6	1.3	1.2		
1996	0.4	0.4	1.1	1.3	0.6	0.7	1.7	1.7	0.5	0.7	1.3	1.2		
1997	0.4	0.3	1.1	1.2	0.6	0.7	1.7	1.6	0.6	0.7	1.3	1.2		

SOURCE: U.S. Department of Commerce, Bureau of the Census, March Current Population Surveys.